

To: Kevin Fleming, Transportation Planner, Department of Transportation
2800 Berlin Turnpike, Newington CT

From: Linda Brunza- Environmental Analyst

Telephone: 860-424-3739

Date: 8/16/2022

Email: Linda.Brunza@ct.gov

Subject: Rehabilitation of Bridge 00793A-Route 15 Northbound over Quinnipiac River

Staff at the Department of Energy and Environmental Protection (DEEP) reviewed the scoping notice for the rehabilitation of Bridge No. 00793A on Route 15 Northbound over the Quinnipiac River in Wallingford. The superstructure of the bridge may be fully demolished and replaced while the substructure, on pilings, may remain in place and repaired made where needed.

Natural Diversity Database

This project is in a Natural Diversity Database Area. The applicant must submit a *Request for Natural Diversity Data Base (NDDDB) State Listed Species Review Form* (DEEP-APP-007) and all required attachments, including maps, to the NDDDB for further review. The Natural Diversity Database is a record of state or federal listed species maintained by the Wildlife Division that may be found in the project area. Please submit a formal application to the Wildlife Division prior to submitting permit applications for a detailed review of the species that may occur in this area. Additional information concerning NDDDB reviews, and the request form may be found on-line at [NDDDB Requests](#).

Fisheries Division

The Fisheries Division reviewed the early stages of this project in December 2021. The Department of Transportation (DOT) will continue to work with the Fisheries Division during the design stage. The bridge is between two fishways on the Quinnipiac River, approximately 1.5 miles downstream is the Haakonsen fishway at the Wallace Dam in the center of Wallingford. Upstream is the Hanover Pond fishway in Meriden. This stretch of the Quinnipiac River is an important migratory corridor and spawning area for American shad, alewife, blueback herring (state listed species of special concern), and sea lamprey. The Fisheries Division wants to ensure that this migratory corridor is open to fish passage and recommends the following restrictions:

1. To protect migratory fish, no unconfined in-water work should occur from April 1 to June 30, inclusive. This prohibition includes the installation and removal of cofferdams. During this period at least one barrel of the bridge should remain open for fish passage.
2. During the spring migration period from April 1 to June 30, if artificial lighting is needed for construction, provisions must be made to limit the amount of artificial lighting over the water. These provisions include installing debris shields composed of dark closed weave fabric that that does not readily transmit light, lowering the lighting closer to the deck surface to limit the diffusion of light, and installing shields or backboards on lights to reduce the amount of light directed over the water.

3. Loud construction activities, like jack hammering, may also interfere with fish migrations and shall not be exceed 90 dB, as measured at the surface of the water at a point closest to the source of the noise, from sunset to sunrise between April 1 to June 30, inclusive.

Land and Water Resources Division

Any activity within federally regulated wetland areas or watercourses at the site may require a permit from the U.S. Army Corps of Engineers pursuant to section 404 of the Clean Water Act. Further information is available on-line at [Army Corps of Engineers, New England District](#) or by calling the Corps Regulatory Branch in Concord, Massachusetts at 978-318-8338. If a permit is required from the U.S. Army Corps of Engineers, a Water Quality Certificate will also be required from DEEP pursuant to section 401 of the Clean Water Act. Staff from the Land and Water Resources Division will be able to clarify the level of permitting needed at DOT's Project Management Meetings. For further information, contact the Land and Water Resources Division at 860-424-3019. A fact sheet regarding 401 Water Quality Certification is available online at [401 Certification](#).

Stormwater General Permit

The General Permit for [Stormwater and Dewatering Wastewaters from Construction Activities](#) may be applicable depending on the size of the disturbance regardless of phasing. The construction stormwater general permit dictates separate compliance procedures for Locally Exempt projects (projects primarily conducted by government authorities) and Locally Approvable projects (projects primarily by private developers).

This general permit applies to discharges of stormwater and dewatering wastewater from construction activities where the activity disturbs more than an acre. The requirements of the current general permit include registration to obtain permit coverage and development and implementation of a Stormwater Pollution Control Plan (SWPCP). The SWPCP contains requirements for the permittee to describe and manage their construction activity, including implementing erosion and sediment control measures as well as other control measures to reduce or eliminate the potential for the discharge of stormwater runoff pollutants (suspended solids and floatables such as oil and grease, trash, etc.) both during and after construction. A goal of 80 percent removal of the annual sediment load from the stormwater discharge shall be used in designing and installing post-construction stormwater management measures. Stormwater treatment systems must be designed to comply with the post-construction stormwater management performance requirements of the permit. These include post-construction performance standards requiring retention and/or infiltration of the runoff from the first inch of rain (the water quality volume or WQV) and incorporating control measures for runoff reduction and low impact development practices.

Projects that are exempt from local permitting (such as DOT) that disturb over one acre must submit a registration form and Stormwater Pollution Control Plan (SWPCP) to the Department at least 60 or 90 days, as identified in the permit, prior to the initiation of construction. In addition to measures such as erosion and sediment controls and post-construction stormwater management, the SWPCP must include a schedule for plan implementation and routine inspections. For further information, contact the division at 860-424-3025 or DEEP.StormwaterStaff@ct.gov. The construction stormwater general permit registrations must be filed electronically through DEEP's e-Filing system known as ezFile. Additional information can be found on-line at: [Construction Stormwater GP](#).

Solid Waste Disposal

DEEP performed a high-level review and found that there are no hazardous waste concerns for this project.

Demolition waste that is not contaminated with asbestos, PCBs, or other materials that require special handling is subject to Connecticut's [solid waste statutes and regulations](#), and must be reused, recycled, or disposed of accordingly. Construction and demolition debris should be segregated on-site and reused or recycled to the greatest extent possible. Waste management plans for construction, renovation or demolition projects are encouraged to help meet the State's reuse and recycling goals. Connecticut's [Comprehensive Materials Management Strategy](#) outlines a goal of 60% recovery rate for municipal solid waste by the year 2024. Part of this effort includes increasing the amount of construction and demolition materials recovered for reuse and recycling in Connecticut. It is recommended that contracts be awarded only to those companies who present a sufficiently detailed construction/demolition waste management plan for reuse/recycling. Additional information concerning construction and demolition material management and waste management plans can be found on the DEEP's [C&D Material Management](#) and [C&D Waste Management Plan](#) web pages

One way that certain types of construction and demolition waste can be reused is as clean fill. Clean fill is defined in section 22a-209-1 of the Regulations of Connecticut State Agencies (RCSA) and includes only natural soil, rock, brick, ceramics, concrete and asphalt paving fragments. Clean fill can be used on site or at appropriate off-site locations. Clean fill does not include uncured asphalt, demolition waste containing other than brick or rubble, contaminated demolition wastes (e.g. contaminated with oil or lead paint), tree stumps, or any kind of contaminated soils. Land-clearing debris and waste other than clean fill resulting from demolition activities is considered bulky waste, also defined in section 22a-209-1 of the RCSA. Bulky waste is classified as special waste and must be disposed of at a permitted landfill or other solid waste processing facility pursuant to section 22a-208c of the Connecticut General Statutes and section 22a-209-2 of the RCSA. A fact sheet regarding disposal of special wastes and the authorization application form may be obtained at: [Special Waste Fact Sheet](#).

Air Management

DEEP Bureau of Air Management typically recommends the use of newer off-road construction equipment that meets the latest EPA or California Air Resources Board (CARB) standards. If newer equipment cannot be used, equipment with the best available controls on diesel emissions including retrofitting with diesel oxidation catalysts or particulate filters in addition to the use of ultra-low sulfur fuel would be the second choice that can be effective in reducing exhaust emissions. The use of newer equipment that meets EPA standards would obviate the need for retrofits.

DEEP also recommends the use of newer on-road vehicles that meet either the latest EPA or California Air Resources Board (CARB) standards for construction projects. These on-road vehicles include dump trucks, fuel delivery trucks and other vehicles typically found at construction sites. On-road vehicles older than the 2007-model year typically should be retrofitting with diesel oxidation catalysts or diesel particulate filters for projects. Again, the use of newer vehicles that meet EPA standards would eliminate the need for retrofits.

Additionally, Section 22a-174-18(b)(3)(C) of the Regulations of Connecticut State Agencies (RCSA) limits the idling of mobile sources to 3 minutes. This regulation applies to most vehicles such as trucks and other diesel engine-powered vehicles commonly used on construction sites. Adhering to the regulation will reduce unnecessary idling at truck staging zones, delivery or truck dumping areas and further reduce on-road and construction equipment emissions. Use of posted signs indicating the three-minute idling limit is recommended. It should be noted that only DEEP can enforce Section 22a-174-18(b)(3)(C) of the RCSA. Therefore, it is recommended that the project sponsor include language similar to the anti-idling regulations in the contract specifications for construction to allow them to enforce idling restrictions at the project site without the involvement of DEEP.

Thank you for the opportunity to review this project. Please note there were no concerns with the potential of hazardous or solid waste with this project, and the project is not in an Aquifer Protection area.

These comments are based on the reviews provided by relevant staff and offices within DEEP during the designated comment period. They may not represent all applicable programs within DEEP. Feel free to contact me if you have any questions concerning these comments.

cc: Camille Fontanella